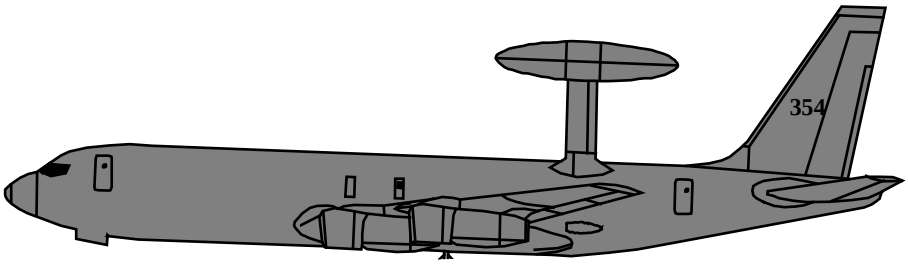
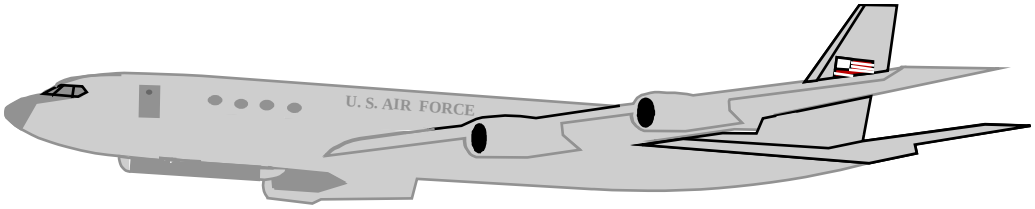
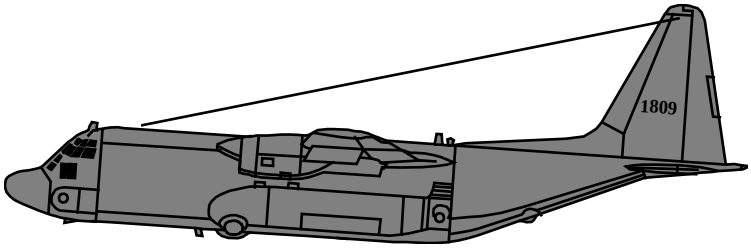
DEPARTMENT OF THE AIR FORCE
Headquarters, United States Air Force
Washington, DC 20330-1480

CFETP 1A4X1
Parts I-II
July 2000

AFSC 1A4X1
Airborne Battle Management Systems Specialty







CAREER FIELD
EDUCATION AND TRAINING PLAN

CAREER FIELD EDUCATION AND TRAINING PLAN
AIRBORNE BATTLE MANAGEMENT SYSTEMS SPECIALTY
AFSC 1A4X1

Table of Contents

PART I

Preface 2
Abbreviations/Terms Explained 2

Section A - General Information 4

Purpose of the CFETP
Use of the CFETP
Coordination and Approval

Section B - Career Progression and Information 6

Specialty Description
Skill/Career Progression
Apprentice (3) Level
Journeyman (5) Level
Craftsman (7) Level
Superintendent (9) Level
Training Decisions
Community College of the Air Force (CCAF)
Career Field Flow Charts 12
Assignment Locations

Section C - Skill Level Training Requirements 18

Purpose
Specialty Description
Apprentice (3) Level
Journeyman (5) Level
Craftsman (7) Level
Superintendent (9) Level

Section D - Resource Constraints 22

PART II

Section A - Specialty Training Standard 23

Section B - Course Objective List 32

Section C - Support Materials 37

Section D - Training Course Index 37

Section E - MAJCOM Unique Requirements 38

OPR: HQ USAF/XOOT (CMSgt Robert C. Shannon)
Approved by: Colonel James J. Brooks
Prepared by: 332TRS/TRR
Supersedes: CFETP 1A4X1, Dated January 1999
Number of Pages: 38

AIRBORNE BATTLE MANAGEMENT SYSTEMS SPECIALTY
AFSC 1A4X1
CAREER FIELD EDUCATION AND TRAINING PLAN

Part I

Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instills rigor in all aspects of career field training.

2. The CFETP consists of two parts; both parts of the plan are used by supervisors to plan, manage, and control training within the career field.

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan; Section B identifies career progression information, duties and responsibilities, training strategies, and career field path; Section C associates each level with specialty qualifications (knowledge, education, training, and other); Section D indicates resource constraints. Some examples are funds, manpower, equipment, and facilities. Note: AFMAN 36-2108, *Airman Classification,* contains the specialty descriptions.

2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training, wartime course, core tasks, and correspondence course requirements; Section B contains the course objective list and training standards supervisors will use to determine if airmen satisfied training requirements; Section C identifies available support materials. An example is a qualification training package (QTP) which may be developed to support proficiency training. QTPs identified in this section have been developed to support upgrade/qualification training. These packages are identified in AFIND 8, *Numerical Index of Specialized Educational Training Publications*; Section D identifies a training course index, which are used to determine resources available to support training. Included here are both mandatory and optional courses; Section E identifies MAJCOM unique training requirements.

3. This CFETP is designed to ensure individuals in AFSC 1A4X1 receive comprehensive and effective training at the appropriate phases of their career. At unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training. Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

Air Force Career Field Manager (AFCFM). Individual appointed by Air Staff DCS's to manage education, training, and resources for a specific career field(s).

Basic Aircraft Qualification (BAQ). An aircrew member who has satisfactorily completed initial qualification training and is qualified to perform aircrew duties in the unit aircraft.

Basic Mission Capable (BMC). An aircrew member, who has satisfactorily completed mission qualification training, does not maintain MR/CMR status, but maintains familiarization in the command or unit operational mission.

Career Enlisted Aviator (CEA). An individual with a primary AFSC of 1Axxx (Aircrew Operations.

Combat Mission Ready (CMR). An aircrew member who has satisfactorily completed mission qualification training and maintains qualification and proficiency in the command or unit operational mission.

Continuation Training (CT). Additional training exceeding requirements with emphasis on present or future duty assignments.

Core Task. A task AFCFMs identify as essential qualification requirements for upgrade within an AFS. These tasks exemplify the essence of the career field--the foundation. Failure to complete core tasks precludes upgrade. Core tasks not applicable to MAJCOMs are waiverable by MAJCOM functional managers.

Course Objective Lists (COL). A publication derived from our initial skills course training standard, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-skill level in this career field. Supervisors use the COL to conduct graduate evaluations in accordance with AFI 36-2201, *Developing, Managing, and Conducting Military Training Programs*.

Course Training Standard (CTS). A training standard identifying the training members will receive in a specific course.

Enlisted Specialty Training. A mix of formal training (technical school) and informal enlisted (OJT) training (life cycle) to qualify and upgrade airmen in each skill-level of a specialty.

Initial Skills Training. A formal school course that results in an award of a 3-skill level AFSC.

Initial Qualification Training (IQT). A training course needed to qualify for basic aircrew duties in an assigned position for a specific aircraft without regard for the unit's operational mission.

Instructional System Development (ISD). A deliberate and orderly, but flexible process for planning, developing, validating, implementing, and reviewing instructional programs. It ensures personnel are taught, in a cost efficient way, the knowledge and skills for successful job performance.

Major Weapons Systems (MWS). All applicable airborne platforms with a crew complement including at least one 1A4X1.

Mission Ready (MR). See **Combat Mission Ready (CMR)**

On-the-Job Training (OJT). Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

Phase I (IQT). Training necessary to initially qualify an aircrew member in a basic crew position and flying duties without regard to the unit's operational mission. This is the minimum requirement for BAQ.

Phase II (MQT). Training necessary to qualify an aircrew member in a specific aircrew position to perform the command's or unit's operational mission. MQT completion is a prerequisite for CMR

Phase III (CT). Training for aircrew members already qualified in their respective aircrew position to maintain their assigned level of proficiency. CT is designed to progressively improve basic aircraft qualification, combat mission ready, basic mission capable, and aircrew members' ability to perform the unit's mission.

Practicum. A means of receiving college credits through Community College of the Air Force (CCAF) Teaching Technology Associates Degree Program for formal school house instructors which covers a wide variety of subjects beyond initial instructor qualification.

Qualification Training. Actual hands-on task performance training designed to qualify an aircrew member in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skill/knowledge training required to do a job.

Qualification Training Package (QTP). An instructional course designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer based, or in other audio visual media.

Resource Constraints. Resource deficiencies, such as funds, facilities, time, manpower, and equipment that preclude desired training from being delivered.

Specialized Training Package and COMSEC Qualification Training Package. A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by the National Security Agency (NSA), and administered by qualified COMSEC maintenance personnel.

Specialty Training Standard (STS). An Air Force publication that describes an AFS in general terms of tasks and knowledge which an airman in that specialty may be expected to perform or to know on the job. It further serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and correspondence courses.

Standard. An exact value, a physical entity, or abstract concept, established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

Total Force. The collective components (active, reserve, guard, and civilian elements) of the United States Air Force.

Upgrade Training (UGT). Training that leads to the award of a higher skill level in an AFS.

War Task. Tasks that AFS functional managers identify as minimum qualification requirements trained in-resident wartime course.

Weapons System Training Package (WSTP). An instructional course which includes IQT, MQT, and CT designed for use at the unit to qualify or aid qualification in a duty position, program, or on equipment. It may be printed, computer-based, flying, simulator, or other audio visual material.

Section A - General Information

1. Purpose. This CFETP provides information necessary for the Air Force Career Field Manager (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training that individuals must receive in order to develop and progress throughout their career. For the purpose of this plan, training is divided into four areas: initial skills, upgrade training (UGT), qualification training (QT), and continuation training (CT). Initial skills training is the Air Force Specialty specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion required for award of the 3-, 5-, 7-, and 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position.

This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge training required for the job. Continuation training is additional training either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required. The CFETP has several purposes, some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. In addition, it is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in this specialty and recommends education/training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and the training medium.

1.4. Identifies major resource constraints that impact full implementation of the desired career field training program.

2. Uses. The plan will be used by MFMs and supervisors at all levels to ensure a comprehensive and cohesive training programs are available and/or instituted for each individual in the specialty.

2.1. AETC training personnel will develop/revise formal resident, non-resident, field and exportable training based on requirements established by the user and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial and upgrade skills requirements. Identified requirements can be satisfied by OJT, resident training, contract training, or exportable courses. MAJCOM-developed training to support this AFSC must be identified for inclusion in this plan and must not duplicate available training resources

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II, will be used as a reference to support training.

2.4. Qualification training packages (QTP) are developed by AETC, MAJCOM functional managers, and/or unit training managers. Unit developed QTPs will be provided to the parent MAJCOM and included in the CFETP.

2.5. Personnel in AFSC 1AXXX are exempt from maintaining OJT Training Folders (AF Form 623). All core tasks identified in this document are satisfied in IQT, MQT, and CT. That training is certified via AF Form 8 by trained instructors and evaluators. Certification of the Form 8 eliminates the requirement to document STS items in this CFETP.

3. Coordination and Approval. The AFCFM is approval authority. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager for this specialty will initiate an annual review of this document by AETC and MFMs to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training. Applicable inputs/changes to this CFETP will be routed to 332 TRS/TRR, 613 Hangar Road, Room 152, Keesler AFB MS 39534-2235.

Section B - Career Progression and Information

4. Specialty Description.

4.1. Airborne Battle Management Systems Apprentice (1A431).

4.1.1. Specialty Summary. Operates airborne battle management systems mission equipment. Gathers, records, displays, and distributes mission information. Maintains communications nets with ground, air, and maritime units. Performs airborne battle management functions under training and operational conditions.

4.1.2. Duties and Responsibilities.

4.1.2.1 Operates airborne battle management systems mission equipment. Performs air, ground, and maritime surveillance. Controls tactical air assets and air operations. Interprets computer-generated displays, data, and alarms, and takes appropriate switch actions. Compares track positions with flight data and/or database files to determine track identification. Performs mission planning, preflight, inflight, and postflight duties according to aircraft technical orders and applicable Air Force Instructions.

4.1.2.2. Gathers, displays, records, and distributes operational mission information. Gathers mission data on ground, air, and maritime objects, and relays data to using agencies. Displays sensor, mission, identification, weather, and other data for battle managers. Updates mission data to tabular displays. Records and reports special interest tracks mission information, weather, emergency signals, and electronic attack (EA) observations.

4.1.2.3. Performs electronic-protection (EP) functions. Uses EP techniques to degrade effectiveness of electronic warfare activities or other external interference. Recommends procedures and techniques to improve EP effectiveness. Configures equipment to eliminate or reduce the effects of EA. Maintains coordination with exterior agencies.

4.1.2.4. Maintains status of air and ground activity. Coordinates with and supports other airborne and ground platforms in distributing and relaying operational target and identification data.

4.2. **Airborne Battle Management Systems Journeyman (1A451).**

4.2.1. Specialty Summary. Operates airborne battle management systems, electro-optical sensor systems; and electronic protection (EP) equipment. Interprets computer-generated displays and alarms. Gathers, records, displays, and distributes mission information. Maintains communications nets with ground, air, and maritime units. Performs airborne battle management functions under training and operational conditions.

4.2.2. Duties and Responsibilities.

4.2.2.1. Operates airborne battle management systems mission equipment. Identifies and maintains surveillance of air, ground, and maritime objects. Controls tactical air assets and air operations. Interprets computer-generated displays, data, and alarms, and takes appropriate switch actions. Compares track positions with flight data and database files to determine track identification. Determines data link requirements. Performs preflight, inflight, and postflight duties according to aircraft technical orders and applicable Air Force Instructions (AFIs).

4.2.2.2. Gathers, displays, records, and distributes operational mission information. Gathers mission data on ground, air, and maritime objects, and relays data to using agencies. Displays sensor data and tactical mission, identification, weather, and other mission data for battle managers. Records special interest track and mission information. Transcribes tactical mission data to status boards. Reports unusual weather, emergency signals, and EA observations. Reviews and reports

equipment status and performance. Maintains status of mission aircraft, targets, and air tasking order information. Distributes alert status and records information.

4.2.2.3. Performs EP functions. Uses EP techniques to degrade effectiveness of electronic warfare activities or other external interference. Recommends procedures and techniques to improve EP effectiveness. Configures equipment to eliminate or reduce the effects of EA. Maintains coordination with exterior agencies.

4.2.2.4. Maintains status of air and ground activity. Coordinates with and supports other airborne and ground platforms in distributing and relaying operational target and identification data.

4.2.2.5. Instructs, evaluates, and supervises airborne battle management system activities. Conducts training for airborne battle management systems personnel. Develops and reviews instructional methods and procedures used in Initial Qualification Training (IQT), Upgrade Training (UGT), and Continuation Training (CT). Reviews training status and recommends remedial training. Evaluates aircrew inflight performances. Reviews trend analysis of flight evaluations to identify training deficiencies. Identifies and corrects faulty operational techniques. Supervises subordinates during the performance of their duties.

4.2.2.6. Performs weapons director duties. Controls aircraft conducting missions such as intercept, interdiction, close air support, search and rescue, combat air patrol, reconnaissance, offensive counter air, and air refueling. Coordinates and exchanges air movement and identification information. Maintains liaison with air defense artillery, surface, and naval fire units to ensure safe passage of friendly air traffic, and to effectively use air weapons resources. Coordinates with air traffic control agencies. Relays threat warnings and weather to aircrews and other agencies. Responsible for flight safety of missions being controlled.

4.2.2.7. Performs Gunship Sensor Operator Duties

4.2.2.8. Performs staff functions. Performs staff duties where aircrew command and control, and gunship sensor operator expertise is required.

4.3. **Airborne Battle Management Systems Craftsman (1A471).**

4.3.1. Specialty Summary. Performs technical airborne battle management and gunship sensor systems operational mission duties; operates, trains and evaluates activities. Performs and assists in mission planning. Maintains publications and currency items. Maintains and supervises communications nets with external agencies. Supervises activities. Performs staff functions.

4.3.2. Duties and Responsibilities.

4.3.2.1 Performs technical airborne battle management and gunship sensor systems mission functions. Reacts to manual and computer-generated console situation and tabular displays to determine optimum airborne equipment settings. Performs EP to degrade the effectiveness of electronic warfare activities or other external influences. Determines data link requirements. Initiates and maintains surveillance of air, ground, and maritime objects. Performs and assists in mission planning and breaking air tasking orders. Formats initialization data. Coordinates mission profile requirements with internal and external agencies. Maintains logs, forms, and database files. Prepares reports, and performs preflight, inflight, and postflight duties according to aircraft technical orders and AFIs.

4.3.2.2. Operates gunship sensors and airborne battle management. Makes sensor operational checks and advises airborne systems technicians of status. Gathers, evaluates, and inserts into database files intelligence data, threat data, and operational capabilities. Monitors radio communications. Passes and receives data from the Immediate Air Request Net. Records, displays, and distributes operational information. Receives, transmits, and relays encoded and decoded

messages from ground command and control agencies. Uses coordinate reference systems. Monitors status of mission aircraft, targets, and air tasking order information. Monitors and maintains air situation displays.

4.3.2.3. Supervises, evaluates, and monitors display of tactical air, ground, and maritime activity. Evaluates airborne individual aircrew inflight performances and systems capabilities, and recommends improvements. Coordinates with airborne, ground, and maritime agencies in distributing and relaying operational threat and identification data. Monitors employment of assigned tactical air assets and operations. Compiles operational data for mission reports. Identifies and corrects faulty operational techniques. Reviews trend analyses.

4.3.2.4. Supervises and performs weapons director duties. Controls aircraft conducting missions such as intercept, interdiction, close air support, search and rescue, combat air patrol, reconnaissance, offensive counter air, and air refueling. Coordinates and exchanges air movement and identification information. Maintains liaison with air defense artillery, surface, and naval fire units to ensure safe passage of friendly air traffic, and to effectively use air weapons resources. Coordinates with air traffic control agencies. Relays threat warnings and weather to aircrews and other agencies. Responsible for flight safety of missions being controlled.

4.3.2.5. Supervises and performs gunship sensor operator duties.

4.3.2.6. Performs staff functions. Performs staff duties at squadron level and above where aircrew expertise is required.

4.4. **Airborne Battle Management Systems Superintendent/CEM (1A491/1A400).**

4.4.1. Specialty Summary**.** Manages and provides expertise of airborne battle management systems and gunship sensor operations. Performs staff functions. Promotes and instills quality awareness in all aspects of airborne operations. Operates airborne battle management systems missions equipment and electro-optical sensor systems. Gathers, records, displays, and distributes mission information. Maintains communications nets with external agencies. Supervises and performs weapons director and Sensor Operator duties.

4.4.2. Duties and Responsibilities**.**

4.4.2.1. Performs technical airborne battle management and gunship sensor systems functions. Performs and assists in mission planning and breaking air tasking orders. Performs preflight, inflight, and postflight duties according to aircraft technical orders and regulations. Makes sensor and battlestaff console operational checks. Monitors and processes manual and computer-generated console situation and tabular displays. Determines optimum settings for airborne battle management and gunship sensor systems. Performs EP to degrade the effectiveness of electronic warfare activities or external influences. Determines data link requirements. Processes encoded and decoded messages from ground, air, and maritime agencies.

4.4.2.2. Plans and organizes airborne command and control systems apprentice/journeyman/craftsman activities. Develops and improves methods of personnel utilization and aircrew operations economy. Establishes standardized procedures for the most efficient inflight personnel use and equipment operation. Advises commanders and staff officers of important changes and developments in the mission operations area. Identifies problems affecting the capability and efficiency of unit operations. Facilitates planning, organizing, and executing operational and training missions.

4.4.2.3. Directs airborne battle management and gunship sensor systems activities. Directs personnel to perform specific preflight, inflight, and postflight operational duties. Revises personnel distribution within assigned mission functions. Monitors methods used to detect, report, identify, and display air, ground, and maritime targets. Supervises personnel in their assigned duties,

including sensor and Identification Friend or Foe (IFF) operations, EP, digital data link, controlling tactical air assets, voice tell, and intra system coordination. Determines mission requirements and recommends operational procedures to meet worldwide contingency and operational tasking.

4.4.2.4. Establishes and directs aircrew training for airborne battle management and gunship sensor systems personnel. Develops and directs instructional methods and procedures used in initial qualification training (IQT), upgrade training (UGT), and continuation training (CT). Ensures applicable aircrew training techniques are being used to train crewmembers for multi-theater employment of airborne command and control systems. Reviews training status and arranges additional, remedial, and continuation training.

4.4.2.5. Inspects and evaluates airborne activities. Conducts periodic inspections of aircrew operations and unit activities. Analyzes inspection findings and initiates corrective actions. Evaluates individual flight performances and systems capabilities and recommends improvements. Reviews trend analysis of flight evaluations to identify training deficiencies. Identifies and corrects faulty operational techniques.

4.4.2.6. Manages airborne battle management systems and gunship sensor operations. Resolves technical and operational problems. Ensures mission objectives concerning personnel adequacy, equipment status, communications, and operating efficiency are consistently attained. Recommends methods, techniques, and procedures to improve systems operation.

4.4.2.7. Performs staff functions. Performs staff duties at squadron level and above where aircrew operational expertise is required.

5. Skill/Career Progression. Adequate training and timely progression from the apprentice to the superintendent skill level play an extremely important role in the Air Force's ability to accomplish its mission. Therefore, it is essential that everyone involved in training do their part to plan, develop, manage, conduct, and evaluate an effective and efficient training program. The guidance provided in this part of the CFETP will ensure individuals receive viable training at the appropriate points in their career. The following narrative and the AFSC 1A4X1 career field flow charts identify the training career path. They define the training required in an individual's career.

5.1. **Apprentice (3) Level.** Completion of the Enlisted Aircrew Undergraduate Course (EAUC) (J3AQR1A411 001) at Sheppard AFB, TX is mandatory for pipeline and non-aviation service cross training students. Course E3ABR1A431-001 (PDS Code127) at Keesler AFB, MS is mandatory for award of the 3-skill level AFSC. Initial skills training requirements are identified and revised (if necessary) annually during the 1A4X1 Utilization and Training Workshop (U&TW) held at Keesler AFB, MS. Task and knowledge requirements are identified in the STS, Part II, Sections A and B. Individuals must complete an initial skills course to be awarded AFSC 1A431.

5.2. **Journeyman (5) Level.** Completion of the following requirements are mandatory for award of the 5-skill level:

5.2.1. Completion of course E3ABR1A431 001

5.2.2. Completion of all STS core tasks for the assigned duty position,

5.2.3. Completion of all QTPs,

5.2.4. Completion of core tasks specified by an asterisk (*) in column 2 of the STS,

5.2.5. Completion of upgrade training (CDC, 12 months minimum OJT is required).

NOTE: For award of AFSC 1A451D, completion of Airborne Battle Management Weapons Director course (W-E3A-1A451D) is mandatory.

5.3. **Craftsman (7) Level.** Completion of the following requirements are mandatory for award of the 7-skill level:

5.3.1. Completion of all tasks for the assigned duty position.

5.3.2. Completion of all QTPs.

5.4. **Superintendent (9) Level.** To be awarded AFSC 1A491, an individual must be a SMSgt or SMSgt selectee, complete the USAF Senior NCO Academy in-residence, and complete any other requirements specified in AFMAN 36-2108, *Airman Classification*.

6. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Airborne Battle Management Systems specialty. This CFETP was developed to include life-cycle (day one through retirement) training requirements for this specialty. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training.

6.1. **Initial Skills Training.** The initial skills training will be revised to provide training needed to prepare graduates for Airborne Battle Management Systems specialty related positions.

6.2. **Five Level Upgrade Training.** The AFSC 1A451 CDC provides required training for upgrade in the Airborne Battle Management Systems specialty related positions.

6.3. **Seven Level Upgrade Training.** The CSAF has approved a variance, eliminating the requirement for in-residence 7-level training for all 1AXXX (Air Operations Career Field) personnel.

7. Community College of the Air Force. Enrollment in CCAF occurs upon completion of basic military training. Off-duty education is a personal choice but is highly encouraged. CCAF provides the opportunity to obtain an Associates in Applied Sciences Degree. Contact the local education officer for more current course information. In addition to its associate degree program, CCAF offers the following:

7.1. **Occupational Instructor Certification.** Upon completion of instructor qualification training, consisting of the instructor methods course and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

7.2. **Trade Skill Certification.** When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

7.3. Degree Requirements: All airmen are automatically entered into the CCAF program. The 5 skill level must be held at the time of program completion. The following degree requirements come from the 1999-2001 CCAF Catalog for the Air and Space Operations Technology (4VAS) degree:

Subject Area	***Semester Hrs***
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective	15
Total	64

7.3.1. **Technical Education (24 Semester Hours):** Twenty-four semester hours are required to fulfill the technical education requirement. Twelve semester hours must be applied from technical core course with the remaining 12 applied from either technical core or technical elective course. Requests to substitute subjects/courses must be approved in advance by the Technical Branch at CCAF.

7.3.1.1. **Technical Core (12-24 Semester Hours):**

Subjects/Courses	***Max Semester Hours***
Aerospace Control and Warning Systems	20
CCAF Internship	16
Space Systems Operations	20

7.3.1.2. **Technical Electives (0-12 Semester Hours).**

Subjects/Courses	***Max Semester Hours***
Astronautics	3
Astronomy	3
Aviation/Flight Safety	3
Basic Electronics Theory/Application	6
Computer Science	6
Enlisted Professional Military Education	12
Management Information Systems	3
Programming Languages	6
Solid-State Theory/Application	3
Space Propulsion	3
Survival Training	3
Technical Writing	3

7.3.2. **Leadership, Management, and Military Studies (6 Semester Hours):** Professional military education and/or civilian management courses.

7.3.3. **Physical Education (4 Semester Hours):** This requirement is satisfied by completion of Basic Military Training. PHE 1000.

7.3.4. **General Education (15 Semester Hours):** Applicable courses must meet the criteria for application of courses to the General Education Requirement (GER) and be in agreement with the definitions of applicable general education subject/courses as provided in the CCAF general catalog.

Subject/Courses	***Semester Hours***
Oral Communication (speech)	3
Written Communication (English composition)	3
Mathematics (intermediate algebra or college-level mathematics)	3
Social Science (anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology)	3
Humanities (courses in fine arts (criticism, appreciation, historical significance, foreign language, literature, philosophy, religion)	3

7.3.5. **Program Elective (15 Semester Hours):** Satisfied with applicable technical education; leadership, management, and military studies; or general education subjects/courses, including natural science courses meeting GER application criteria and foreign language credit earned at the Defense Language Institute or through the Defense Language Proficiency Test. Six semester hours of CCAF degree-applicable technical credit otherwise not applicable to this program may be applied.

7.4. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should be actively pursuing an associate's degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

8. Career Field Flow Charts.

Figure 1. Enlisted Career Path

Figure 2. Accession Level Training Flow

Figure 3. Retrainee Training Flow

Figure 4. WD Training Flow

Figure 5. 1A4X1 Assignment Locations

Enlisted Career Path

Education and Training Requirements	GRADE REQUIREMENTS				
	Rank	Earliest Sew-on	Air Force Average Sew-on	1A4X1 Average Sew-on	High Year of Tenure (HYT)
Basic Military Training School					
Apprentice Technical School (3-Skill Level)	Amn A1C	6 months 16 months			
Upgrade To Journeyman (5-Skill Level) - Complete 3 months duty position and apprentice experience before beginning journeyman training. - Minimum 15 months on-the-job training. - Complete appropriate CDC.	SrA	28 months	3 years	3 years	10 years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).					
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt select - 18 months OJT - Formal advanced skill training. - Must be 7-skill level for TSgt sew-on.	SSgt	3 years	7.4 years	7.5 years	20 years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt MSgt	5 years 8 years	14.1 years 16.5 years	13.9 years 16.4 years	20 years 24 years
USAF Senior NCO Academy (SNCOA) - Must be a SMSgt or SMSgt selectee. - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	SMSgt	11 years	20.4 years	19.9 years	26 years
Upgrade To Superintendent (9-Skill Level) - Minimum rank of SMSgt. - Must be a resident graduate of SNCOA (Active Duty Only).	CMSgt	14 years	21.9 years	25.6 years	30 years
Data current as of Jun 2000					

Figure 1

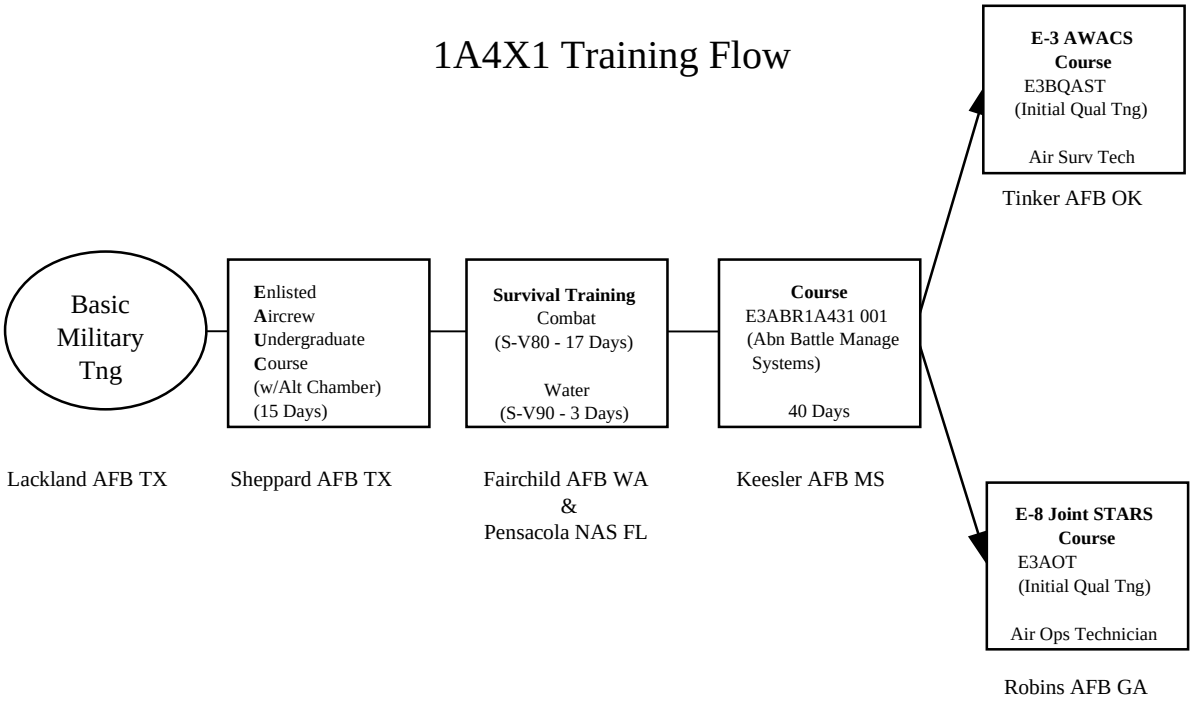


Figure 2

8.1. The flow outlined in figure 2 represents the formal training courses required for personnel entering and becoming fully qualified in the Airborne Battle Management Systems Specialty. The locations, course lengths, and titles are subject to change. Changes will be updated in the Education and Training Course Announcements (ETCA) web site (formally AFCAT 36-2223, USAF Formal Schools Catalog) by the course owner.

8.1.1. The course flow has been developed to minimize days students are awaiting training and to ensure survival training is received prior to AFSC award--minimizing the impact of not having the prerequisites come before entering weapons system training.

8.1.2. Personnel graduating from the Keesler course are awarded AFSC 1A431 and authorized to wear the Basic Aircrew Member Badge. (The badge is not permanent until completion of Initial Qualification Training at any of the two training locations. Failure to complete IQT is authority for commanders to revoke wear of the aircrew badge.)

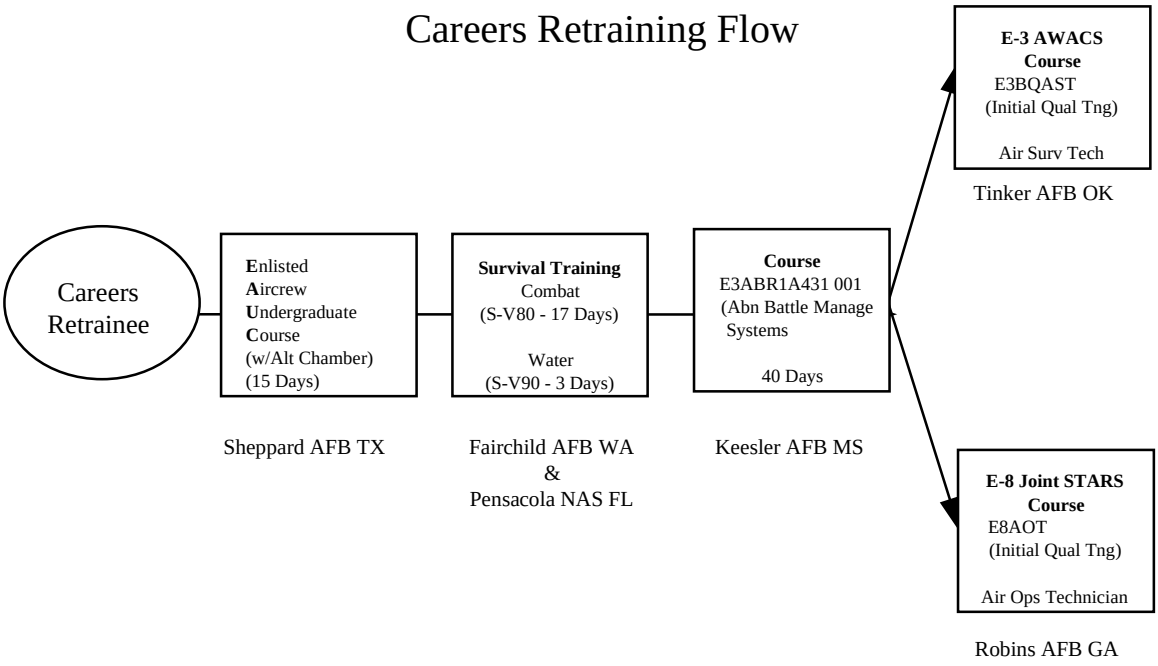


Figure 3

8.2. The flow outlined in figure 3 represents the formal training courses required for first-term personnel retraining into the Airborne Battle Management Systems Specialty (AFSC 1A4X1). This training flow depicts the mandatory formal training flow for individuals retraining to become Air Surveillance Technicians(AWACS), and Air Operations Technicians (Joint STARS).

8.2.1. Personnel retraining-in, will be required to attend EAUC (Sheppard), survival training (Fairchild and Pensacola), technical training, and weapons systems IQT.

WD Training Flow

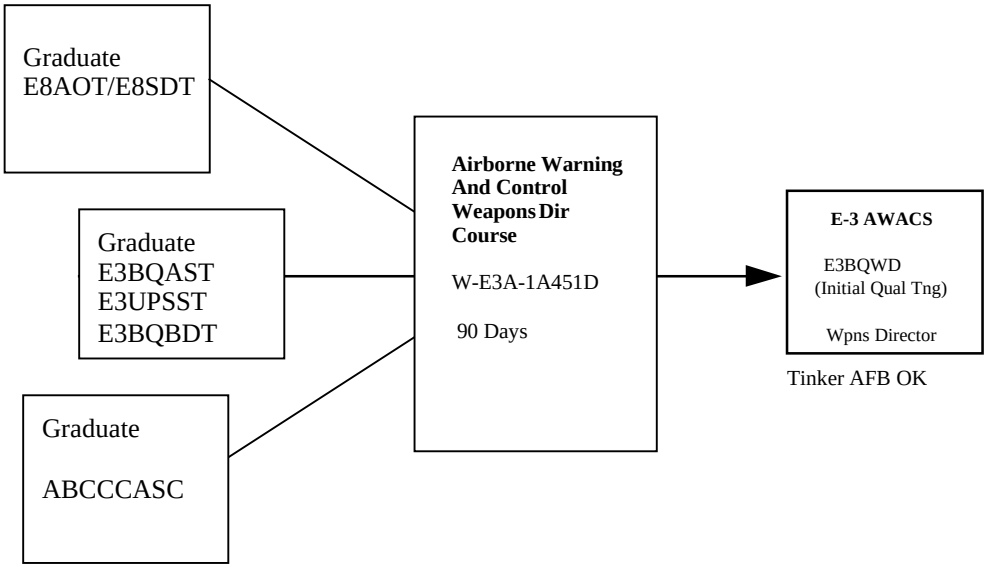


Figure 4

8.3. The flow outlined in figure 4 represents the formal training courses required for personnel entering and becoming fully qualified as Airborne Battle Management Systems Weapon Director. The locations, course lengths, and titles are subject to change. Changes will be updated in the Education and Training Course Announcements (ETCA) web site (formally AFCAT 36-2223, USAF Formal Schools Catalog) by the course owner. This chart depicts the mandatory training flow for individuals enroute to become WDs on the E-3 (AWACS) platform. Upon completing the formal training at Tyndall AFB they will be awarded the "D" suffix. All other UGT will follow normal progression to the 7, and 9 levels.

1A4X1 Assignment Locations

Location	CMS	SMS	MSG	TSG	SSG	SRA	A1C	Student
Davis-Monthan AFB AZ	x	x	x	x	x	x		
Eglin AFB FL				x				
Elmendorf AFB AK	x		x	x	x	x	x	
Schreiver AFB CO			x					
Geilenkirchen AB GE			x	x	x			
Hickam AFB HI	x							
Hurlburt Field FL	x	x	x	x	x	x		
Kadena AB JA		x	x	x	x	x	x	
Keesler AFB MS			x	x	x	x		
Kirtland AFB NM				x				
Langley AFB VA	x	x	x	x				
Melbourne, FL		x		x				
Nellis AFB NV			x	x	x			
Osan AB Korea			x	x				
Randolph AFB TX			x					
Robins AFB GA	x		x	x	x	x	x	x
Seattle, WA				x				
Shape, Belgium		x						
Shaw AFB SC			x					
Sheppard AFB TX					x			
Tinker AFB OK	x	x	x	x	x	x	x	x
Tyndall AFB FL		x	x	x	x			

Figure 5

NOTE: The authorizations listed above are subject to change without notice. Crewmembers interested in assignments to locations listed should consult their MAJCOM functional manager or the AFPC resource manager for more detailed information about requirement for a specific location.

Section C - Skill Level Training Requirements

9. Purpose. Skill level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Sections A and B of this CFETP.

10. Specialty Qualifications:

10.1. **Apprentice Level Training:**

10.1.1. **Specialty Qualification**.

10.1.1.1. **Knowledge**. Knowledge is mandatory of radar fundamentals and the operational characteristics of airborne battle management, surveillance, and mission systems; target detection and tracking functions; interpreting computer-generated console situation and tabular displays, electronically generated data, using identification procedures, performing electronic countermeasures functions; passing, receiving and interpreting data link information; using air-to-air and air-to-ground communications systems; emergency procedures and equipment; maintenance of standard and technical publications; performing emergency action procedures and conducting theater air activities.

10.1.1.2. **Education**. Completion of high school or having a general education development (GED) equivalency is mandatory for entry into this AFSC.

10.1.1.3. **Training**. Completion of the Enlisted Aircrew Undergraduate Course (J3AQR1A411 001) at Sheppard AFB Texas is mandatory for pipeline and non-aviation service cross training students. Completion of the Airborne Battle Management Course (E3ABR1A431 001) (PDS Code X29) at Keesler AFB MS is mandatory for award of the 3-skill level AFSC.

10.1.1.4. **Other**. Physical qualification for aircrew duty according to AFI 48-143, *Class III Medical Standards,* is mandatory for entry, award, and retention of this AFSC. Qualification for aviation service according to AFIs 11-401 and 11-402 are mandatory for entry, award and retention of this AFSC. Completion of Basic Survival Training (Course S-V80-A) and Water Survival Training (Course S-V86-A or S-V90-A) is desired before entry into courses E3BQAST at Tinker AFB OK or E8AOT at Robins AFB GA, and mandatory prior to award of the 5-skill level. Eligibility for a secret clearance according to AFI 31-501, *Personnel Security Program Management* is mandatory for award and retention of the semi-skilled and skilled AFSCs.

10.1.2. **Training Sources and Resources**. Completion of the course E3ABR1A431-001 (PDS Code 127) at Keesler AFB MS satisfies the knowledge and training requirements specified in the specialty qualification section (above) for award of the 3-skill level.

10.1.3. **Implementation**. Entry into training is accomplished through initial accessions from BMTS or through retraining from any AFSC. After graduation from course E3ABR1A431 001, IQT starts when an individual is assigned to their first duty position. Thereafter, upgrade training is initiated anytime an individual is assigned duties they are not qualified to perform. QTPs will be used concurrently to obtain necessary duty positions qualification.

10.2. **Journeyman Level Training:**

10.2.1. **Specialty Qualification**. All qualifications for AFSC 1A431 apply to the 1A451 requirements.

10.2.1.1. **Knowledge**. Knowledge is mandatory of radar fundamentals and operations, characteristics and limitations of airborne battle management, surveillance, and mission systems;

target detection and tracking functions; computer-generated console situation and tabular displays, electronically generated data, and air tasking orders; receiving, recording, and relaying operational threat data; identification procedures and techniques; electronic protect functions; data link requirements; communications systems; emergency procedures and equipment; maintaining publications; performing emergency action procedures and conducting theater air activities. For AFSC 1A451D, knowledge is mandatory of air weapons control procedures and techniques, and aircraft performance characteristics and armament.

10.2.1.2. **Education**. To assume the rank of SSgt, individuals must be a graduate of the Airman Leadership School (ALS).

10.2.1.3. **Training**. Completion of the following is mandatory for award of the 5-skill level:

10.2.1.3.1. Completion of course E3ABR1A431-001 (PDS Code127) at Keesler AFB MS and mission qualification training (Tinker, Davis-Monthan, or Robins AFB) is required. Personnel careers retraining into AFSC 1A4X1 must attend the course).

10.2.1.3.2. All STS core tasks for assigned duty position.

10.2.1.3.3. All core tasks specified by an asterisk (*) in column 2 of the STS.

10.2.1.3.4. Completion of upgrade training (CDC and 15 months minimum performance period).

10.2.1.3.5. For award of AFSC 1A451D, completion of Airborne Warning and Control System Weapons Director Course at Tyndall AFB is mandatory.

10.2.1.4. **Experience**. Experience in performing or supervising activities such as aerospace surveillance systems, airborne command and control systems and/or mission equipment functions is desired. For upgrade to AFSC 1A451, experience is mandatory in functions such as: target detection, tracking, and reporting; receiving, displaying, recording and relaying threat data; or airborne warning and control systems operations. For retention of AFSC 1A451D, mission ready certification as a weapons director is mandatory.

10.2.1.5. **Other**. Physical qualification for aircrew duty according to AFI 48-143 Class III medical standards for entry, award, and retention of this AFSC is mandatory. Qualification for aviation service according to AFIs 11-401 and 11-402 for entry, award and retention of this AFSC are mandatory. Completion of Combat Survival Training (Course S-V80-A) and Water Survival Training (Course S-V86-A or S-V90-A) is desired before entry into course E3BQAST at Tinker AFB OK or E8AOT at Robins AFB GA, and mandatory prior to award of the 5-skill level. Eligibility for a secret clearance according to AFI 31-501 is mandatory for award and retention of the semi-skilled and skilled AFSCs.

10.2.2. **Training Sources and Resources**. Completion of CDC 1A451 satisfies the knowledge requirements specified in the specialty qualification section (above) for award of the 5-skill level. The STS identifies all core tasks required for qualification. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training is contained in AFIND 8. A list of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP. Requests for qualified trainers should be directed to your base training manager.

10.2.3. **Implementation**. Entry into upgrade training is initiated when an individual possesses the 3-skill level. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. CDC 1A451 and QTPs will be completed to be awarded the 5-skill level.

10.3. **Craftsman Level Training:**

10.3.1. **Specialty Qualification**. All 1A431/51 qualifications apply to the 1A471 requirements.

10.3.1.1. **Knowledge**. Knowledge is mandatory of characteristics and limitations of airborne battle management surveillance and mission systems; target detection and tracking functions; computer-generated console situation and tabular displays, electronically generated data, and air tasking orders; receiving, recording, and relaying operational threat data; identification procedures and techniques; electronic countermeasures functions; data link requirements; communications systems; emergency procedures and equipment; maintaining publications; aircrew management principles and supervisory techniques; emergency action procedures; and theater air activities.

10.3.1.2. **Education**. To assume the ranks of SSgt and MSgt, individuals must be graduates of the Airman Leadership School (ALS) and NCO Academy, respectively.

10.3.1.3. **Training**. Completion of the following requirements are mandatory for award of the 7-skill level:

10.3.1.3.1. Minimum rank of SSgt and 12 months OJT.

10.3.1.3.2. Completion of all QTPs.

10.3.1.4. **Experience**.

10.3.1.4.1. AFSC 1A471, qualification is mandatory as an Airborne Battle Management Systems Journeyman. Also, experience is mandatory in airborne warning and control systems, airborne battlefield command and control center, or joint surveillance target attack radar system . Experience is desirable in performing or supervising activities such as aerospace surveillance systems.

10.3.1.4.2. AFSC 1A471D, qualification is mandatory as an Airborne Battle Management Systems Journeyman, Weapons Director. Also, for award and retention of AFSC 1A471D, the experienced required for annual qualification and certification as a combat mission ready weapons controller is mandatory.

10.3.1.5. **Other**. Physical qualification for aircrew duty according to AFI 48-143 Class III medical standards is mandatory for entry, award, and retention of this AFSC. Qualification for aviation service according to AFIs 11-401 and 11-402 are mandatory for entry, award and retention of this AFSC. Eligibility for a secret clearance according to AFI 31-501 is mandatory for entry, award and retention of this AFSC.

10.3.2. **Training Sources and Resources**. The STS identifies all tasks required for qualification. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training is contained in AFIND 8. A list of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP.

10.3.3. **Implementation**. Entry into upgrade training is initiated when an individual possesses the 5-skill level and is in the grade of SSgt. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. All QTPs will be completed to be awarded the 7-skill level.

10.4. **Superintendent Level Training**:

10.4.1. **Specialty Qualifications**.

10.4.1.1. **Knowledge**. Knowledge is mandatory of airborne battle management systems operations, administrative techniques, aircrew personnel management, staff functions, budgeting, scheduling, training development, inspections, and standardization and evaluations, aircrew management principles and supervisory techniques; radar fundamentals and the operational characteristics of airborne battle management, surveillance, and mission systems; target detection and tracking functions; interpreting computer-generated console situation and tabular displays; electronically generated data; using identification procedures; performing electronic counter countermeasures functions; passing, receiving, and interpreting data link information; using communications systems; emergency procedures and equipment; maintenance publications; performing emergency action procedures and conducting theater air activities.

10.4.1.2. **Education**. To assume the grade of CMSgt, individuals must be a graduate of the USAF Senior NCO Academy or Army/Navy Senior Academy in-residence.

10.4.1.3. **Training**. Completion of all training tasks is mandatory.

10.4.1.4. **Experience**. For AFSC 1A491, qualification is mandatory as an Airborne Battle Management Systems Craftsman. Experience is desirable in performing or supervising activities such as aerospace surveillance systems, training development, exercise plans and schedules, and standardization and evaluation.

10.4.1.5. **Other**. Physical qualification for aircrew duty according to AFI 48-143 Class III medical standards is mandatory for entry, award, and retention of this AFSC. Qualification for aviation service according to AFIs 11-401 and 11-402 are mandatory for entry, award and retention of this AFSC. Eligibility for a secret clearance according to AFI 31-501 is mandatory for entry, award, and retention of this AFSC.

10.4.2. **Training Sources and Resources**. The STS identifies all tasks required for qualification in the individual's duty position. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training is contained in AFIND 8. A list of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP. Requests for qualified trainers should be directed to your base training manager.

10.4.3. **Implementation**. Entry into upgrade training is initiated when an individual possesses the 7-skill level and is in the grade of SMSgt. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. All QTPs will be completed to be awarded the 9-skill level.

Section D - Resource Constraints

11. Purpose. This section identifies known resource constraints which preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, are target completion dates. Resource constraints will be reviewed and updated at least annually.

12. Apprentice Level Training: None identified.

13. Journeyman Level Training: None identified.

14. Craftsman Level Training: None identified.

Part II

Section A - Specialty Training Standard

1. Implementation. This STS will be used for technical training provided by AETC for classes beginning **06 November 2000** and graduating **10 January 2001**.

2. Purpose. As prescribed in AFI 36-2201, this STS:

2.1. Lists in column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties at the 3-, 5-, and 7-skill level AFSC in the Airborne Battle Management Systems Specialty ladder of the Aircrew Operation Career Field. These are based on an analysis of the duties in AFMAN 36-2108. *Items in column 1 with an asterisk (*) are the tasks/knowledge items that are trained in the resident wartime course.* Column 2 (Core Tasks) identifies, by asterisk (*), specialty-wide training requirements. NOTE: Core task is minimum qualification training required for upgrade to the 5-skill level, but only pertain to or are a function of the work center assigned.

2.2. Shows formal training and correspondence course requirements. Column 3 shows the proficiency to be demonstrated on the job by the graduate as a result of training (in Course E3ABR1A431-001 (PDS Code 127) described in Education and Training Course Announcements (ETCA) web site (formally AFCAT 36-2223, USAF Formal Schools Catalog) and the career knowledge provided by the correspondence course. There is no advanced course. See AFIADL/AFSC/CDC listing maintained by the unit OJT manager for current CDC listings.

2.3. Provides certification for OJT. Column 4 is used to record completion of task and knowledge training requirements. Certification is accomplished as outlined in AFI 36-2201.

2.4. **Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.5. Becomes a job qualification standard for on-the-job training and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. Go means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct use of procedures.

2.6. Is a guide for development of promotion tests used in the Weighted Airmen Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members to be most appropriate for promotion to higher grades. Questions are based on study references listed in the WAPS study catalog. Individual responsibilities are in AFI 36-2605.

3. Recommendations. Report unsatisfactory performance of individual course graduates to 332 TRS/TRR, 613 Hangar Road, Room 152, Keesler AFB MS 39534-2235. Reference specific STS paragraphs.

BY ORDER OF THE SECRETARY OF THE AIR FORCE
OFFICIAL

Attachment
Qualitative Requirements

THIS BLOCK FOR IDENTIFICATION PURPOSES ONLY		
NAME OF TRAINEE		
PRINTED NAME *(Last, First Middle Initial)*	INITIALS *(Written)*	SSAN

PRINTED NAME OF CERTIFYING OFFICIAL AND WRITTEN INITIALS	
N/I	N/I
N/I	N/I
N/I	N/I
N/I	N/I
N/I	N/I
N/I	N/I

QUALITATIVE REQUIREMENTS

PROFICIENCY CODE KEY		
	SCALE VALUE	DEFINITION: The Individual
TASK PERFORMANCE LEVELS	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
	2	Can do most parts of the task. Needs help only on hardest parts. (PARTIALLY PROFICIENT)
	3	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
*TASK KNOWLEDGE LEVELS	a	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
	b	Can determine step by step procedures for doing the task. (PROCEDURES)
	c	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)
	d	Can predict, isolate, and resolve problems about the task. (ADVANCED THEORY)
**SUBJECT KNOWLEDGE LEVELS	A	Can identify basic facts and terms about the subject. (FACTS)
	B	Can identify relationship of basic facts and state general principles about the subject. (PRINCIPLES)
	C	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	D	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)

EXPLANATIONS

* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Examples: b and 1b)

** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task or for a subject common to several tasks.

\- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.

x This mark is used alone in course columns to show that training is required but not given due to limitations in resources.

Attachment 1

Users are responsible for annotating training references (TR) to identify current references pending STS revision

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
1. CAREER LADDER PROGRESSION TR: AFMAN 36-2108										
1.1. Progression in AFSC 1A4X1		A			B					
1.2. Duties of AFSC 1A431/51/71/91/1A400/D	*	A			B					
2. COMMANDS TR: AF Mission Directives										
2.1. Air Combat Command (ACC)	*	A			B					
2.2. Pacific Air Forces (PACAF)	*	A			B					
2.3. North American Aerospace Defense (NORAD)		A			B					
2.4. North Atlantic Treaty Organization (NATO)		A			B					
2.5. Air Force Special Operations Command		A			B					
2.6. US Special Operations Command		A			B					
2.7. Air Force Reserve Command		A			B					
2.8. Other Supporting Commands		A			B					
* 3. AIRBORNE WEAPONS SYSTEMS TR: AFIs 11-2E3/TC18 VOL 3, 11-2EC-130, 11-2E8, 11-2AC130; AFTTP 3-3; T.O.s 1E-3A-43-1-1, 1C-130E-(II)-1, 1E-8C-43-1-2	*									
3.1. ABCCC										
3.1.1. Mission		A			B					
3.1.2. Capabilities		A			B					
3.1.3. Functions		A			B					
3.1.4. Self-Protection		-			B					
3.2. AWACS										
3.2.1. Mission		A			B					
3.2.2. Capabilities		A			B					
3.2.3. Functions		A			B					
3.2.4. Self-Protection		-			B					
3.3. Joint STARS										
3.3.1. Mission		A			B					
3.3.2. Capabilities		A			B					
3.3.3. Functions		A			B					
3.3.4. Self-Protection		-			B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
3.4. AC-130 Gunship		A			B					
3.4.1. Mission		A			B					
3.4.2. Capabilities		A			B					
3.4.3. Functions		A			B					
3.4.4. Self-Protection		-			B					
4. COMMAND CONTROL COMMUNICATION, and COMPUTER (C4) SYSTEMS SECURITY	*									
* 4.1. Safeguarding Sensitive and Classified Information and Equipment TR: DOD 5200.1R; AFIs 31-401, 14-302; AFH 31-405	*									
4.1.1. Security of facilities TR: AFJI 31-102		a			-					
4.1.2. Handling		b			-					
4.1.3. Storage		b			-					
4.1.4. Documentation		b			-					
4.1.5. Protection		b			-					
4.1.6. Security classification codes		A			-					
* 4.2. Communication Security (COMSEC) TR: DoD 5200.1R; AFI 31-401; AFSSI 4100	*									
4.2.1. Definition of COMSEC		A			-					
4.2.2. Security procedures		A			-					
4.2.3. Classify information		A			-					
4.2.4. Security violations		A			-					
4.2.5. Critical information (CIs)		A			-					
4.2.6. Security precautions involved in communications		A			-					
* 4.3. Operational Security (OPSEC) TR: AFI 10-1101; AFPAM 10-1107	*									
4.3.1. Definition of OPSEC		A			-					
4.3.2. History of OPSEC		A			-					
4.3.3. Relationship of OPSEC to COMSEC information security and physical security		A			-					
4.3.4. Common OPSEC vulnerabilities		A			-					
4.3.5. OPSEC significance of unclassified data CIs		A			-					
4.3.6. Specific OPSEC vulnerabilities of AFSC 1A4x1		A			B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
4.4. Physical Security TR: AFJI 31-102										
4.4.1. Work area		A			B					
4.4.2. Flightline		A			B					
4.5. Computer Security (COMPUSEC) TR: AFSSI 9100		A			B					
* 5.. AIR FORCE OCCUPATIONAL SAFETY AND HEALTH PROGRAM (AFOSH) TR: AFIs 91-301, -302; AFI 123-1										
5.1. Occupational Hazards	*									
5.1.1. Laser Hazards		A			B					
5.1.2. Munitions		A			B					
5.2. AFOSH Standards										
5.2.1. Safety precautions in the work area	*	A			-					
5.2.2. Use safety procedures around electronic equipment	*	2b			B					
5.2.3. Safety procedures during airborne operations	*	A			B					
5.2.4. Safety procedures during flightline operations	*	A			B					
5.3. Foreign Object Damage (FOD) Program	*	A			-					
5.4. Bird Avoidance Strike Hazard (BASH) TR: AFI 91-202, AFPAM 91-212		A			B					
* 6. COMMUNICATION TR: AFIs 33-113, 33-xxx Series; ACPs 121,125,165; AFI 11-214; AFKAG; AFTTP 3-1 Vol 1, Atch 1-1										
6.1. Radio Telephone Procedures	*	A			B					
6.2. Use Authentication Procedures										
6.2.1. Electronic encryption systems	*	-			B					
6.2.2. Use manual encryption systems	*	2b			B					
6. COMMUNICATIONS (Continued)										
6.3. Minimize Procedures	*	A			B					
6.4. Communications Systems TR: JCS Pub 3-56.23; T.O.s 1E-3A-43-1-1, , 1E-8C-43-1-2										
6.4.1. Employ secure procedures	*	2b			B					
6.4.2. Employ nonsecure procedures	*	2b			B					
6.4.3. Use internal communications nets		2b			B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
6.4.4. Use external communications nets										
6.4.4.1. Perform voice communication										
6.4.4.1.1. UHF		2b			B					
6.4.4.1.2. VHF		2b			B					
6.4.4.1.3. HF		2b			B					
6.4.4.1.4. SATCOM		A			B					
6.4.4.2. Digital										
6.4.4.2.1. TADIL-A/LINK 11		A			B					
6.4.4.2.2. TADIL J/LINK 16		A			B					
6.4.4.2.3. TADIL B/LINK1		A			B					
6.4.4.2.4. SCDL		A			B					
6.4.4.2.5. Broadcast Intelligence (BI) Systems		-			B					
* 7. ELECTRONIC WARFARE TR: AF PD 10-7	*									
7.1. Electronic Attack (EA) / Electronic Protection (EP)										
7.1.1. Mechanical		A			B					
7.1.2. Electronic		A			B					
7.1.3. Communication		A			B					
7.2. EA Threat		A			B					
7.3. Operator EP Techniques		A			B					
7.4. EA Activity										
7.4.1. Jamming		A			B					
7.4.2. Air Force Spectrum Interference Resolution (AFSIR) TR: AFI 10-707		A			B					
8. WEATHER TR: AFMAN 15-113										
8.1. Fundamentals	*	A			B					
8.2. Reports	*	A			B					
8.3. Effects on the Weapons System		A			B					
8.4. Mission Impact		A			B					
* 9. BASIC CONCEPTS TR: ACCP 55-51; MSC 3-1; MCR 55-125										
9.1. Sensors										

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
9.1.1. Radar										
9.1.1.1. Theory	*	A			B					
9.1.1.2. Components		A			B					
9.1.2. IFF / SIF										
9.1.2.1. Theory	*	A			B					
9.1.2.2. Components		A			B					
9.1.2.3. Modes		A			B					
9.1.3. Passive detection system		A			B					
9.1.4. Electro-Optical Sensors										
9.1.4.1. Theory		-			B					
9.1.4.2. Systems		-			B					
9.2. Computers	*									
9.2.1. Fundamentals		A			B					
9.2.2. Components		A			B					
9.2.3. Respond to generated displays		2b			B					
9.2.4. Interpret common symbology		2b			B					
9.3. Man-Machine Interface (MMI)										
9.3.1. Operate MMI		2b			B					
10. OPERATIONAL FUNCTIONS TR: AFDD-2; MCR 55-125										
10.1. General Functions										
10.1.1. Mission planning		A			-					
10.1.2. Mission execution		A			-					
10.1.3. Mission debriefing		A			-					
* 10.2. Surveillance										
10.2.1. Detection		2b			B					
10.2.2. Acquisition		2b			B					
10.2.3. Tracking		2b			B					
10.2.4. Reporting		2b			B					
* 10.3. Identification TR: ACCIs 13-MCS Vol III; 13-AOC Vol III AFI 11-214; NI 10-15										
10.3.1. Purpose	*	A			B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
10.3.2. Use identification methods		2b			B					
10.3.3. Classify tracks		2b			B					
10.4. Weapons Control TR: AFDD-2; AFI 11-214; MCR 55-130; ACCP 55-51; AFTTP 3-3										
10.4.1. Types of missions		A			B					
10.4.2.Types of control		A			B					
10.4.3. Threat systems										
10.4.3.1. Friendly Systems		-			B					
10.4.3.2. Enemy Systems		-			B					
10.5. Command and Control TR: MCR 55-130,										
10.5.1. Battle management										
10.5.1.1. Scrambles		A			B					
10.5.1.2. Diverts		A			B					
10.5.1.3. Alert status warning		A			B					
* 10.5.1.4. Target data		A			B					
* 10.5.1.5. Intelligence		A			B					
* 10.5.2. Crew resource management TR: AFI 11-290	*	-			B					
* 11. USE REFERENCE SYSTEMS TR: MCR 55-130	*									
11.1. Geographical Reference System		2b			B					
11.2. Military Grid Reference System		2b			B					
11.3. Universal Transverse Mercator (UTM)		2b			B					
11.4. Latitude / Longitude (Lat / Long)		2b			B					
11.5. Bearing and Range		2b			B					
12. OPERATIONAL INTERFACE TR: ACCIs 13-MCS Vol III; 13-AOC Vol III; JCS Pub 3-56.23	*									
12.1. Theater Air Control System		A			B					
12.2. Army C2 System		A			B					
12.3. Naval C2 System		A			B					
12.4. Marine C2 System		A			B					
12.5. NORAD		A			B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
12.6. Other Agencies		A			B					
13. AIRCREW PUBLICATIONS TR: AFIs 11-215, 37-160; AFPD 21-3										
13.1. Aircrew Technical Order System										
13.1.1. Purpose	*	A			-					
13.1.2. Type		A			-					
13.1.3. Organization		A			-					
13.1.4. Maintenance		A			-					
13.2. Standard Publications										
13.2.1. Purpose	*	A			-					
13.2.2. Type		A			-					
13.2.3. Organization		A			-					
13.2.4. Maintenance		A			-					
14. AIRCREW MANAGEMENT TR: AFIs 11-202, 11-401, -402, -412, 38-201										
14.1. Responsibilities		-			B					
14.2. Aviation Service	*	A			B					
14.3. Aircrew Training Program TR: AFI 11-202 Vol 1										
14.3.1. Training phases		B			B					
14.3.2. Life support training (LST) TR: AFI 11-301	*	-			B					
14.3.3. Flight Crew Information File (FCIF)		A			B					
14.3.4. Initiate Flight Publications Improvement Reports		-			B					
15. INCENTIVE PAYS TR: DoD 7000.14-R Part A		A			-					

Section B - Course Objective List

4. Measurement. Each objective is indicated as follows: **W** indicates task or subject knowledge which is measured using a written test, **PC** indicates required task performance which is measured with a performance progress check, and **PC/W** indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check. **P** indicates performance test only.

5. Standard. The standard is 83% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained.

6. Proficiency Level. Most task performance is taught to the "2b" proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step by step procedures for doing the task.

7. Course Objective. These objectives are listed in the sequence taught by Block of Instruction.

7.1. **Initial Skills Course:**

7.1.1. **Block I.**

7.1.1.1. Introduction to Airborne Battle Management Systems (ABMS)

7.1.1.1.1. Identify career progression throughout the 1A4X1 career field. STS: 1.1., 14.3.1.1., 14.3.1.2., 14.3.1.3. 15., Measure: W

7.1.1.1.2. Identify different skill levels within the 1A4X1 career field. STS: 1.2. Measure: W

7.1.1.1.3. Specify the major commands using the ABMS subdivision. STS: 2.1., 2.2., 2.3., 2.4., 2.5. Measure: W

7.1.1.2. Airborne Battle Management Systems (ABMS)

7.1.1.2.1. Define the mission of the different ABMS within the 1A4X1 career field. STS: 3.1.1., 3.2.1., 3.3.1. Measure: W

7.1.1.2.2. Identify the capabilities of the different ABMS within the 1A4X1 career field. STS: 3.1.2., 3.2.2., 3.3.2. Measure: W

7.1.1.2.3. Identify the operational roles of the different ABMS within the 1A4X1 career field. STS: 3.1.3., 3.2.3., 3.3.3. Measure: W

7.1.1.2.4. Identify elements of the Ground Station Module subsystem of Joint STARS. STS: 3.3.3. Measure: W

7.1.1.3. Operations Security (OPSEC)

7.1.1.3.1. Identify common OPSEC vulnerabilities of ABMS operations. STS: 4.3.1., 4.3.2., 4.3.3., 4.3.4., 4.3.5., 4.3.6. Measure: W

7.1.1.4. Command, Control, Communications and Computer (C4) Security

7.1.1.4.1. Define methods of safeguarding classified materials and equipment. STS: 4.1.2., 4.1.3., 4.1.4., 4.1.5. Measure: W

7.1.1.4.2. Identify methods of securing facilities. STS: 4.1.1. Measure: W

7.1.1.4.3. Identify elements of the Physical Security Program. STS: 4.4.1., 4.4.2. Measure: W

7.1.1.4.4. Select categories of security classifications. STS: 4.1.6., 4.2.3. Measure: W

7.1.1.4.5. Specify the proper mode of communication used with security classifications. STS: 4.2.1., 4.2.2., 4.2.4., 4.2.5., 4.2.6. Measure: W

7.1.1.4.6. Define Computer Security (COMPUSEC) in airborne command and control computer operations. STS: 4.5. Measure: W

7.1.1.5. Aircrew Publications

7.1.1.5.1. Define elements of the aircrew Technical Order (T.O.) system. STS: 13.1.1., 13.1.2., 13.1.3., 13.1.4. Measure: W

7.1.1.5.2. Define standard publications for the 1A4x1 career field. STS: 13.2.1., 13.2.2., 13.2.3., 13.2.4. Measure: W

7.1.1.5.3. Identify aspects of the Flight Crew Information File. STS: 13.4 Measurement: W

7.1.1.6. Air Force Occupational Safety and Health (AFOSH)

7.1.1.6.1. Define the Foreign Object Damage (FOD) program. STS: 5.3. Measure: W

7.1.1.6.2. Identify AFOSH standards unique to airborne operations. STS: 5.1., 5.2.1., 5.2.3., 5.2.4., 5.4. Measure: W

7.1.1.7. Reference Systems and Uses

7.1.1.7.1. Using a Geographical Reference System (GEOREF) plot sheet, plot reference system coordinates with at least 80% accuracy. STS: 11.1. Measure: PC

7.1.1.7.2. Using a Military Grid Reference System (MGRS) Universal Transverse Mercator (UTM) plot sheet, plot reference system coordinates with at least 80% accuracy. STS: 11.2. Measure: PC

7.1.1.7.3. Using a Latitude and Longitude plot sheet, plot reference system coordinates with at least 80% accuracy. STS: 11.3. Measure: PC

7.1.1.7.4. Using a Bearing and Range (B/R) plot sheet, plot reference system coordinates with at least 80% accuracy. STS: 11.4. Measure: PC

7.1.2. **Block II.**

7.1.2.1. Basic Concepts

7.1.2.1.1. Identify basic airborne radar operations. STS: 9.1.1.1., 9.1.1.2. Measure: W

7.1.2.1.2. Define basic Identification Friend or Foe/Selective Identification Feature (IFF/SIF) used with Command and Control Systems. STS: 9.1.2.1., 9.1.2.2., 9.1.2.3., 9.1.3. Measure: W

7.1.2.1.3. Match computer generated displays on ABMS to their symbology. STS: 9.2.1, 9.2.2. Measure: W

7.1.2.2. Communications

7.1.2.2.1. Identify Radio and Telephone (R/T) procedures. STS: 6.1. Measure: W

7.1.2.2.2. Using KTL L 500 TRIAD Authentication System, authenticate transmissions with no more than one error and one instructor assist. STS: 6.2.2. Measure: PC

7.1.2.2.3. Using KTL L 500 TRIAD Authentication System, issue challenge/reply with no more than one error and one instructor assist. STS: 6.2.2. Measure: PC

7.1.2.2.4. Using KTL L 500 TRIAD Authentication System, authenticate with no more than one error and one instructor assist. STS: 6.2.2. Measure: PC

7.1.2.2.5. Identify ABMS communications systems. STS: 6.3., 6.4.1., 6.4.2., 6.4.3., 6.4.4.1.1., 6.4.4.1.2., 6.4.4.1.3., 6.4.4.1.4., 6.4.4.2.1., 6.4.4.2.2., 6.4.4.2.3., 6.4.4.2.4. Measure: W

7.1.2.2.6. Specify the importance of coordination in ABMS. STS: 10.5.2.1, 10.5.2.2. Measure: W

7.1.2.3. Electronic Warfare

7.1.2.3.1. Specify types of Electronic Attack (EA). STS: 7.1.1., 7.1.2., 7.1.3. Measure: W

7.1.2.3.2. Identify threats to operations in an airborne EA environment. STS: 7.2. Measure: W

7.1.2.3.3. Select types of Electronic Protection (EP) used in an airborne EA environment. STS: 7.3. Measure: W

7.1.2.3.4. Identify EA processes in an airborne environment. STS: 7.4.1., 7.4.2. Measure: W

7.1.3. **Block III.**

7.1.3.1. Operational Functions

7.1.3.1.1. Identify surveillance fundamentals on ABMS. STS: 10.2.1., 10.2.2., 10.2.3. Measure: W

7.1.3.1.2. Define the process of identification on ABMS. STS: 10.3.1., 10.3.2., 10.3.3. Measure: W

7.1.3.1.3. Identify weapons activities on ABMS. STS: 10.4.1., 10.4.2. Measure: W

7.1.3.1.4. Identify ABMS general functions. STS: 10.1.1., 10.1.2., 10.1.3. Measure: W

7.1.3.1.5. Identify the fundamentals of battle management in ABMS. STS: 10.5.1.1., 10.5.1.2., 10.5.1.3., 10.5.1.4., 10.5.1.5. Measure: W

7.1.3.2. Operational Interface

7.1.3.2.1. Identify the operational interface of ABMS with other agencies. STS: 12.1., 12.2., 12.3., 12.4., 12.5., 12.6. Measure: W

7.1.3.3. Weather

7.1.3.3.1. Identify weather information used in ABMS operations. STS: 8.1., 8.2. Measure: W

7.1.3.3.2. Identify the effects weather can have on ABMS. STS: 8.3. Measure: W

7.1.4. **Block IV**

7.1.4.1. E-8 Crew Positions

7.1.4.1.1. Identify terms associated with E-8 crew positions. STS: 14.2. Measure: W

7.1.4.2. Basic Operator Workstation (OWS) Operations

7.1.4.2.1. Using the CACTUS Procedural Trainer and the 93ACWHB 55-1, Vol. 1, identify the

functional areas of the Operator Workstation (OWS) with no more than three errors and one instructor assist. STS: 5.2.2, 9.2.1, 9.2.2. Measure: P, W

7.1.4.2.2. Using the CACTUS Procedural Trainer and the 93ACWHB 55-1, Vol. 1, assign a console with no more than one error. STS: 5.2.2, 9.3.1. Measure: P

7.1.4.2.3. Using the CACTUS Procedural Trainer and the 93ACWHB 55-1, Vol. 1, respond to alarms and alerts with no more than three errors and one instructor assist. STS: 5.2.2, 9.2.3, 9.3.1. Measure: P, W

7.1.4.2.4. Using the CACTUS Procedural Trainer and the 93ACWHB 55-1, Vol. 1, configure the OWS for a mission. STS: 5.2.2, 9.2.3, 9.2.4, 9.3.1. Measure: P, W

7.1.4.3. Basic Tracking Operations

7.1.4.3.1. Using the CACTUS Procedural Trainer and the 93ACWHB 55-1, Vol. 1, identify potential targets with no more than one error and one instructor assist. STS: 5.2.2, 9.2.4, 9.3.1, 10.2.1. Measure: P, W

7.1.4.3.2. Using the CACTUS Procedural Trainer and the 93ACWHB 55-1, Vol. 1, distinguish between potential air and ground data with no more than one error and one instructor assist. STS: 5.2.2, 9.2.3, 9.2.4, 9.3.1, 10.2.1. Measure: P, W

7.1.4.3.3. Using the CACTUS Procedural Trainer and the 93ACWHB 55-1, Vol. 1, obtain a bearing and range with no more than one error. STS: 5.2.2, 9.2.3, 9.2.4, 9.3.1 Measure: P, W

7.1.4.3.4. Using the CACTUS Procedural Trainer and the 93ACWHB 55-1, Vol. 1, obtain a bearing and range with no more than one error. STS: 5.2.2, 9.2.3, 9.2.4, 9.3.1 Measure: P, W

7.1.4.4. Voice Tell

7.1.4.4.1. Using the CACTUS Procedural Trainer and the 93ACWHB 55-1, Vol. 1, perform console communications functions with no more than three errors and one instructor assist. STS: 5.2.2, 6.4.3, 6.4.4. Measure: P

7.1.4.4.2. Using the CACTUS and the 93ACWHB 55-1, Vol. 1, report data by voice with no more than three errors and one instructor assist. STS: 6.4.4. Measure: P

7.1.5. **Block V.**

7.1.5.1. E-3 Crew Positions

7.1.5.1.1. Identify terms associated with E-3 crew positions. STS: 14.2. Measure: W

7.1.5.2. Situation Display Console (SDC)

7.1.5.2.1. Identify each functional area of the SDC. STS: 9.2.1., 9.2.2. Measure: W

7.1.5.2.2. Match each SDC control and feature with its description. STS: 9.2.1., 9.2.2. Measure: W

7.1.5.2.3. Using the CACTUS Procedural Trainer and 552 ACWHB55-1, Vol. III, locate each functional area and its features on the SDC with no more than three errors and one instructor assist. STS: 5.2.2., 9.3.1., 9.3.2. Measure: P

7.1.5.3. Mission ADS Panel

7.1.5.3.1. Using the CACTUS Procedural Trainer, use features of the Mission ADS Panel with no more than three errors and one instructor assist. STS: 5.2.2., 6.4.2., 6.4.3. Measure: P

7.1.5.3.2. Using the CACTUS Procedural Trainer, establish two-way communications with no more than three errors and one instructor assist. STS: 5.2.2., 6.4.1., 6.4.2., 6.4.3. Measure: P

7.1.5.4. Console Checkout, Setup, and Display

7.1.5.4.1. Using the CACTUS Procedural Trainer, an aircrew aid, and 552 ACWHB 55-1 Vol. III, prepare a console to conduct surveillance operations with no more than three errors and one instructor assist. STS: 5.2.2., 9.3.1., 9.3.2. Measure: P

7.1.5.4.2. Match categories select switch identifiers with the descriptions of the data they control. STS: 9.2.1., 9.2.2. Measure: W

7.1.5.5. Console Operations

7.1.5.5.1. Define the ground rules for SDC function select keys. STS: 9.2.1. Measure: W

7.1.5.5.2. Match a list of switch action symbols with descriptions of their meanings. STS: 9.2.1. Measure: W

7.1.5.5.3. Given an operational console and 552 ACWHB 55-1 Vol. III, interpret ASSIGNED CONSOLES switch action (S/A) with no more than three errors and one instructor assist. STS: 5.2.2., 9.2.3., 9.2.4., 9.3.1., 9.3.2. Measure: P

7.1.5.5.4. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, respond to alarms/alerts with no more than three uncorrected errors. STS: 5.2.2., 9.2.3., 9.3.1., 9.3.2. Measure: W/P

7.1.5.5.5. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, associate alarm/alert SID displays with their meaning with no more than three uncorrected errors. STS: 5.2.2., 9.2.3., 9.3.1., 9.3.2. Measure: P

7.1.5.5.6. Match computer generated error messages with their meanings. STS: 5.2.2, 9.2.1, Measure: W/P

7.1.5.5.7. Using the CACTUS Procedural Trainer and an aircrew aid, check out a console with no more than three errors and one instructor assist. STS: 5.2.2., 9.3.1., 9.3.2. Measure: P

7.1.5.5.8. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, assign a surveillance console with no more than three errors and one instructor assist. STS: 5.2.2., 9.3.1., 9.3.2. Measure: P

7.1.5.6. Updating Tabular Displays (TDs)

7.1.5.6.1. Match tabular display terms with a description of their meanings. STS: 9.2.1., 9.2.2. Measure: W

7.1.5.6.2. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, perform actions associated with displaying and updating tabular data with no more than three errors and one instructor assist per switch action. STS: 5.2.2., 9.3.1., 9.3.2. Measure: P

7.1.5.7. Basic Switch Actions

7.1.5.7.1. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, perform console communications actions with no more than three errors and one instructor assist per switch action. STS: 5.2.2., 6.4.3., 9.3.1., 9.3.2. Measure: W/P

7.1.5.7.2. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, perform basic switch actions with no more than three errors and one instructor assist per switch action. STS: 5.2.2., 9.2.3., 9.3.1., 9.3.2. Measure: P

7.1.5.8.Tracking

7.1.5.8.1. Using the CACTUS Procedural Trainer and 552 ACWB 55-1 Vol. III, establish an air picture with no more than three errors and one instructor assist. STS: 5.2.2., 9.2.3., 9.2.4., 9.3.1., 9.3.2., 10.2.1., 10.2.2. Measure: W/P

7.1.5.8.2. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, identify situation display information, with no more than three errors and one instructor assist. STS: 5.2.2., 9.2.3., 9.2.4., 9.3.1., 9.3.2., 10.2.2. Measure: W/P

7.1.5.8.3. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, maintain an air picture with no more than three errors and one instructor assist. STS: 5.2.2., 9.2.3., 9.2.4., 9.3.1., 9.3.2., 10.2.2. Measure: W/P

7.1.5.9. Identification Switch Actions

7.1.5.9.1. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, establish identification criteria with no more than three errors and one instructor assist. STS: 5.2.2., 9.3.1., 9.3.2., 10.3.2., 10.3.3. Measure: W/P

7.1.5.9.2. Using the CACTUS Procedural Trainer and 552 ACWHB 55-1 Vol. III, perform identification functions with no more than three errors and one instructor assist per switch action. STS: 5.2.2., 9.3.1., 9.3.2., 10.3.2., 10.3.3. Measure: W/P

7.1.5.8. Voice Tell

7.1.5.10.1. Using the CACTUS Procedural Trainer, an aircrew aid, and a voice data net with a simulated external agency, report tracks by voice with no more than three errors and one instructor assist. STS: 5.2.2., 6.4.3., 6.4.4.1.1., 6.4.4.1.2., 6.4.4.1.3., 10.2.3. Measure: P

7.2. **Advanced Skills Course:**

NOTE: There is currently no advanced course. This area is reserved.

Section C - Support Material

8. The following list of support materials is not all-inclusive; however, it covers the most frequently referenced areas.

NOTE: This area is reserved.

Section D - Training Course Index

9. Purpose. This section of the CFETP identifies training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field training programs.

10. Air Force In-Residence Courses.

COURSE NUMBER	COURSE TITLE	LOCATION
J3AQR1A41110 001	Enlisted Aircrew Undergraduate Course	Sheppard AFB
E3ABR1A431-001	Airborne Battle Management Systems Apprentice	Keesler AFB
S-V80-A	Combat Survival Training	Fairchild AFB
S-V86-A	Water Survival Training	Pensacola NAS
S-V90-A	Water Survival Training (non-parachuting)	Fairchild AFB
W-E3A-1A451D	Airborne Warning and Control System Weapons Director Course	Tyndall AFB

11. Air Force Institute for Advanced Distributed Learning (AFIADL) Courses.

COURSE NUMBER	COURSE TITLE
CDC 1A451	Airborne Battle Management Systems Apprentice

Section E - MAJCOM Unique Requirements

12. Air Combat Command Courses.

COURSE NUMBER	COURSE TITLE	LOCATION
E3BQWD	AWACS Weapons Director Course	Tinker AFB OK
ABCCCASC	ABCCC Airborne Strike Controller	Davis-Monthan AFB AZ
Y120022	Classroom Instructor Course	Dyess AFB TX
E3BQAST	AWACS Airborne Surveillance Technician	Tinker AFB OK
E3UPSST	AWACS Senior Surveillance Technician	Tinker AFB OK
E8AOT	Joint Stars Air Operations Technician	Robins AFB GA
ACC-AWDC	Advanced Weapons Director Course	Nellis AFB NV
E8SDT	Joint Stars Senior Director Technician	Robins AFB GA

13. Air Force Special Operations Command Courses.

COURSE NUMBER	COURSE TITLE	LOCATION
AC130USO	AC-130U Sensor Operator	Hurlburt Field FL
AC130HSO	AC-130H Sensor Operator	Hurlburt Field FL